

Name \_\_\_\_\_

## Estimate Fraction Sums and Differences

**Essential Question** How can you make reasonable estimates of fraction sums and differences?

COMMON CORE STANDARD CC.5.NF.2

Use equivalent fractions as a strategy to add and subtract fractions.

### UNLOCK the Problem REAL WORLD

Kimberly will be riding her bike to school this year. The distance from her house to the end of the street is  $\frac{1}{6}$  mile. The distance from the end of the street to the school is  $\frac{3}{8}$  mile. About how far is Kimberly's house from school?

You can use benchmarks to find reasonable estimates by rounding fractions to 0,  $\frac{1}{2}$ , or 1.

#### One Way Use a number line.

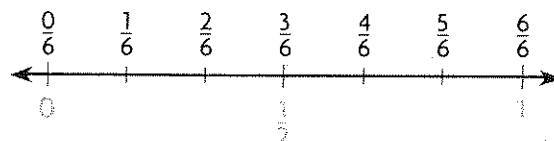
Estimate.  $\frac{1}{6} + \frac{3}{8}$

**STEP 1** Place a point at  $\frac{1}{6}$  on the number line.

The fraction is between \_\_\_\_\_ and \_\_\_\_\_.

The fraction  $\frac{1}{6}$  is closer to the benchmark \_\_\_\_\_.

Round to \_\_\_\_\_.

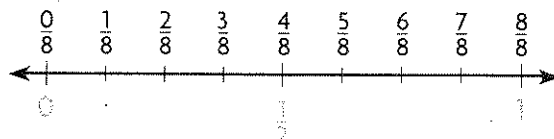


**STEP 2** Place a point at  $\frac{3}{8}$  on the number line.

The fraction is between \_\_\_\_\_ and \_\_\_\_\_.

The fraction  $\frac{3}{8}$  is closer to the benchmark \_\_\_\_\_.

Round to \_\_\_\_\_.



**STEP 3** Add the rounded fractions.

So, Kimberly's house is about \_\_\_\_\_ mile from the school.



Name \_\_\_\_\_

# Share and Show



Estimate the sum or difference.

1.  $\frac{5}{6} + \frac{3}{8}$

a. Round  $\frac{5}{6}$  to its closest benchmark. \_\_\_\_\_

b. Round  $\frac{3}{8}$  to its closest benchmark. \_\_\_\_\_

c. Add to find the estimate. \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

2.  $\frac{5}{9} - \frac{3}{8}$

3.  $\frac{6}{7} + 2\frac{4}{5}$

✓ 4.  $\frac{5}{6} + \frac{2}{5}$

5.  $3\frac{9}{10} - 1\frac{2}{9}$

6.  $\frac{4}{6} + \frac{1}{9}$

✓ 7.  $\frac{9}{10} - \frac{1}{9}$

## On Your Own

Estimate the sum or difference.

8.  $\frac{5}{8} - \frac{1}{5}$

9.  $\frac{1}{6} + \frac{3}{8}$

10.  $\frac{6}{7} - \frac{1}{5}$

11.  $\frac{11}{12} + \frac{6}{10}$

12.  $\frac{9}{10} - \frac{1}{2}$

13.  $\frac{3}{6} + \frac{4}{5}$

14.  $\frac{5}{6} - \frac{3}{8}$

15.  $\frac{1}{7} + \frac{8}{9}$

16.  $3\frac{5}{12} - 3\frac{1}{10}$

### Math Talk

#### MATHEMATICAL PRACTICES

Explain how you know whether your estimate for  $\frac{9}{10} + 3\frac{6}{7}$  would be greater than or less than the actual sum.